

To create your PowerPoint presentation based on the business model and target customer persona you've developed for Urban Cooling Systems LLC, here's how you can organize the slides and approach each requirement:

Slide 1: Title Slide

Title: Design Challenge: Urban Cooling Systems

Your name

Date

Course information

Slide 3: Photographic Documentation

Include photos of urban areas suffering from heat island effects, dense developments, or examples of cooling technology.

Provide a brief description of how these photos represent the problem you're trying to solve.

Slide 4: Target Customer Persona

Who is Affected: Detail the types of customers impacted by the problem—governments, real estate developers, business owners, and property managers.

Where/When: Explain that the problem primarily affects people in high-heat cities during peak summer months when temperatures soar past 100°F (38°C).

Slide 5: Target Customer Demographics

Location: Cities like Dubai, Jazan City, Phoenix, and Bangkok.

Key Demographic Factors: Urban developers, business owners, and government institutions focused on sustainability and cost reduction.

Economic Status: Target areas are economic hubs, financially equipped to invest in cooling solutions.

Slide 6: Emerging Technologies (1-3 Years)

Technology 1: Smart energy grids and IoT-connected cooling systems.

Technology 2: AI-based energy consumption analytics for optimal cooling.

Technology 3: Solar-powered cooling technologies integrated into urban infrastructures.

Provide examples of companies or groups working on these technologies, such as Google's Sidewalk Labs or companies in smart city innovations.

Slide 7: Human-Centered Design & Technological Advances

Discuss how your urban cooling system could use human-centered design, focusing on the needs of both citizens and government institutions.

Explain how technological advances (like data analytics and IoT) could enable smarter cooling solutions for urban environments.

Slide 8: Constraints and Limitations

Financial Constraints: Some businesses may not have the budget for advanced cooling systems.

Technological Barriers: Some cities may lack the infrastructure required for smart city technologies.

Customer Education: Businesses and governments may need education on how the system works and its long-term benefits.

Slide 9: Variants to the Design Challenge

Substitute Resources: Explore alternatives such as passive cooling designs (green roofs, reflective surfaces).

Adjustments to the Value Proposition: Highlight how a modular cooling system could be offered in stages to reduce upfront costs.

Business Model Adjustments: Consider a leasing model for businesses that cannot afford large upfront investments.

Slide 10: Value Created for Customers

Value Proposition: Explain how your solution will create value for businesses (10% reduction in cooling costs, improved employee productivity, etc.).

Measure Improvements: Discuss how you would track cost savings, energy reductions, and environmental impact.

Slide 11: Conclusion and Recommendations

Summarize the importance of addressing the heat issue in urban cities.

Recommend further exploration of partnerships with government agencies and technology providers.

Slide 12: References

Include at least two scholarly sources.

Cite sources following APA guidelines.

This outline follows the structure of the assignment requirements and integrates your business model. Be sure to include compelling visuals, bullet points, and concise text to keep the presentation engaging and clear. Let me know if you need help expanding on any sections or further customization!